

(19)



Europäisches Patentamt

European Patent Office

Office européen des brevets



(11)

EP 0 994 342 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
28.03.2001 Bulletin 2001/13

(51) Int Cl.7: **G01N 21/84**, G01N 21/25,
G01N 21/01

(43) Date of publication A2:
19.04.2000 Bulletin 2000/16

(21) Application number: **99402517.9**

(22) Date of filing: **13.10.1999**

(84) Designated Contracting States:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE
Designated Extension States:
AL LT LV MK RO SI

- Imura, Yasuyuki
Hyogo 651-2273 (JP)
- Kobayashi, Hironori
Hyogo 651-2273 (JP)
- Ishisaka, Masaki
Hyogo 670-0946 (JP)

(30) Priority: **15.10.1998 JP 29404198**

(71) Applicant: **Sysmex Corporation**
Kobe-shi, Hyogo 651-0073 (JP)

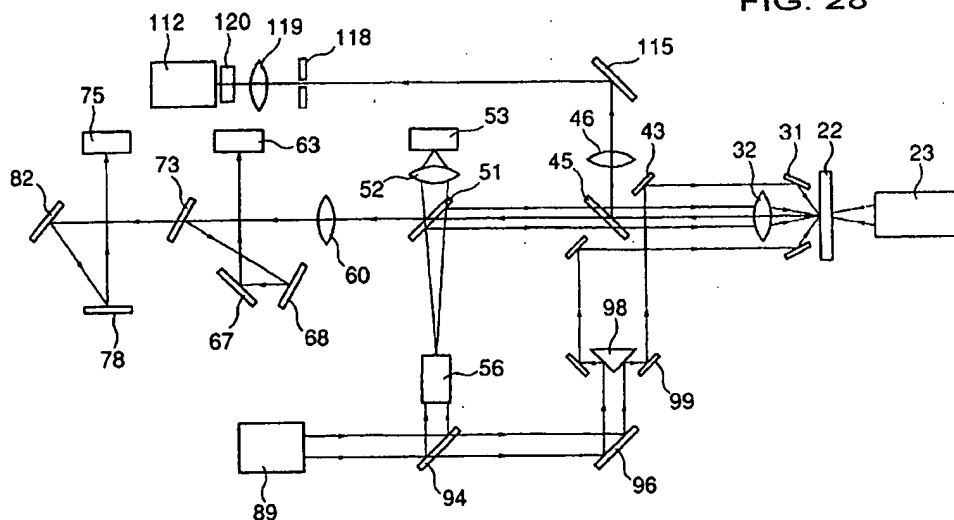
(74) Representative: **Jacquard, Philippe Jean-Luc et al**
CABINET ORES,
6, Avenue de Messine
75008 Paris (FR)

(72) Inventors:
• Kusuzawa, Hideo
Hyogo 651-1513 (JP)

(54) Compact system for optical analysis

(57) An optical information measuring apparatus includes: a light source (89,23) section capable of emitting a plurality of light beams; a light guiding section (86,98,99,48,31) for directing and supplying the plurality of light beams from the light source section to an object (22); an object lens (32) arranged facing the object; a

plurality of light receiving sections (63,75,112) for respectively receiving the light beams from the object via the object lens; and a frame section for integrally mounting a plurality of optical elements including the light source section, the light guiding section, the object lens, and the light-receiving sections.

**FIG. 28****EP 0 994 342 A3**



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 99 40 2517

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	WO 97 45718 A (CIBA GEIGY AG ;BRUNO ALFREDO EMILIO (CH); BARNARD STEVEN MARK (US)) 4 December 1997 (1997-12-04)	1,4	G01N21/84 G01N21/25 G01N21/01
Y	* page 4, line 12 - line 17 * * page 4, line 24 - page 5, line 3 * * page 5, line 18 - line 22 * * page 6, line 20 - line 25 * * page 12, line 27 - line 32 * * figures 1,2,5 * ---	2,3,8,9	
Y	EP 0 841 555 A (SPECTRONIC INSTR INC) 13 May 1998 (1998-05-13) * column 1, line 26 - line 35 * * column 3, line 15 - line 34 * * column 3, line 53 - column 4, line 11 * * column 4, line 12 - line 22 * * column 5, line 12 - line 38 * * figures 2,3,5 * ---	2,3,8,9	
X,P	US 5 943 122 A (HOLMES DUANE C) 24 August 1999 (1999-08-24) * column 1, line 6 - line 10 * * column 3, line 66 - column 4, line 28 * ---	1,5	TECHNICAL FIELDS SEARCHED (Int.Cl.7) G01N G01J
E	WO 99 60380 A (CEPHEID) 25 November 1999 (1999-11-25) * page 23, line 15 - line 23 * * page 24, line 2 - line 24 * * page 27, line 19 - line 28 * * figures 7-10 * --- -/--	1,6,7	
The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 31 January 2001	Examiner Navas Montero, E
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

EPO FORM 1503 03 82 (P04C01)



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 99 40 2517

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	GB 2 133 901 A (MO I NEFTECHIMITSCHESKOJ I 1 GAS;UNIV MISHKOLTSSKY TYAZHEL TEKH) 1 August 1984 (1984-08-01) * page 1, line 96 - line 114 * * page 1, line 122 - line 126 * * page 2, line 70 - line 75 * * figures 1-9 * -----	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 31 January 2001	Examiner Navas Montero, E
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03 82 (Pu/Co)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 99 40 2517

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

31-01-2001

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9745718 A	04-12-1997	AU 3092597 A	05-01-1998
		EP 0901620 A	17-03-1999
		JP 2000512747 T	26-09-2000
		US 6084683 A	04-07-2000
EP 0841555 A	13-05-1998	US 5774209 A	30-06-1998
US 5943122 A	24-08-1999	EP 0971218 A	12-01-2000
		JP 2000039398 A	08-02-2000
WO 9960380 A	25-11-1999	AU 4194099 A	06-12-1999
GB 2133901 A	01-08-1984	SU 1091739 A	23-03-1987
		CH 664017 A	29-01-1988
		DE 3401478 A	09-08-1984
		FR 2539514 A	20-07-1984
		HU 34084 A,B	28-01-1985
		SE 454216 B	11-04-1988
		SE 8400207 A	19-07-1984

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82